In the Specification

Please replace paragraph beginning on page 2 line 18 with the following amended paragraph:

If it is desired to further increase the degree of multiplexing in the optical transport system, frequency ~~utilizationefficiency~~ utilization efficiency becomes an issue. WDM is based on fixed and descrete bandwidth occupation on the frequency axis, and a 100 GHz grid is chosen according to the ITU standard for example. In contrast, TDM (time division multiplexing) is based on allocating a channel to a time slot, bandwidth occupation is continuous around each carrier frequency.

Please replace paragraph beginning on page 2 line 26 with the following amended paragraph:

Although network transmission in the WDM mode (WDM-NW) is possible, it is impractical even in the future to expect end-to-end to all optical transport because of S/N degradation, group velocity dispersion, and non-linear optical effects. Therefore, 3R-function, that is ~~regenerationequalizing~~ regeneration equalizing amplification and clock extracting, in every WDM-NW becomes essential. In doing so, there is an additional benefit that TDMs at the entry points to WDM-NW will have the effect of reducing the number of type 3R circuits required.

Please replace paragraph beginning on page 12 line 7 with the following amended paragraph:

Figure 2 shows various applications of tributaries connected to 40GTS: such as an application to transport within one district of DPT (dynamic packet transfer) ring 21 using one channel in 40Gbit/s as an example of IP/SONET (refer to port technology and applications overview, ~~http://cio.cisoco.jp/warp/public/ccciseo/mkt/servprod/opt/tech/dpta#wp.pdf),~~ an application to transport within one district of BLSR (bi-directional line switched ring) 22 using OC-192 similarly using one channel in 40Gbit/s as an exampleof conventional SONET; and STM-16 LT (line terminating equipment) as an example of the conventional SDH.